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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/468,437	06/06/1995	TAKEO HODA	3408/589	5230
24367 7590 03/23/2007 SIDLEY AUSTIN LLP 717 NORTH HARWOOD SUITE 3400 DALLAS, TX 75201			EXAMINER NGUYEN, HUY THANH	
			ART UNIT 2621	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

08/468,437

Applicant(s)

HODA ET AL.

Examiner

HUY T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 64 is rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki (5,034,804).

Regarding claim 64, Sasaki discloses a camera (Figs. 6A-6B) comprising a camera body; an imaging device (26) which conducts a photographing operation, wherein following the photographing operation, said imaging device outputs image information (column 6, lines 13-55); an inside memory (316) provided inside the camera body; a recorder which stores image information outputted from said imaging device in a memory card (15) (column 7, lines 45-65).

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Sasaki further teaches a controller (241 and 317) has a detecting means (CPU 241) for detecting an available capacity of a memory card and connection of the memory card (column 8, line 65 - 68, column 9, lines 15-37, Fig. 10), determining a remaining the capacity of the memory card is sufficient for storing the second image since the remaining capacity of the memory card is checked for the next captured image after an image is captured by the memory, generating an alarm to alert the user and permitting the image information to be stored in the memory card when the memory card is inserted in the camera and has sufficient capacity for storing the image information and storing the image information a memory when the memory card is not inserted in the camera or the memory capacity is not sufficient to store the image information.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 52-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (5,067,029) in view of Sasaki et al (5,034,804).

Regarding claims 52-55 and 64, Takahashi discloses a camera (Fig. 10, column 2, lines 32 –45, column 3, lines 15-25, column 10, lines 28-41)) comprising a camera body; an imaging device (12,14) which conducts a photographing operation, wherein following the photographing operation, said imaging device outputs image information; an inside memory (40) provided inside the camera body; a connection adapted to be connected to a medium (34 or 56) inserted inside a housing provided in the camera body; a recorder which stores image information, outputted from said imaging device, in one of the inside memory and the medium (column 10, lines 30-50), and

a changer (24) which selectively determines which one of the inside memory and the medium is used to store image information outputted from said imaging device; and a controller which controls said changer so that (a) the image information is automatically stored in the medium (column 4, lines 1-5, column 7, lines 40-50, column 10, lines 30-50).

Takahashi fails to teach the medium is a memory card that is inserted in the camera using a memory card slot in the camera.

Sasaki teaches a camera (Fig. 1 and 6) having a memory card slot in the camera body used receiving a memory card (15) as an alternative medium for storing image information in order to reduce the overall size of the camera (column 1, lines 10-30).

It would have been obvious to one of ordinary skill in the art to modify Takahashi with Sasaki by incorporating a card slot in the camera body to receive a memory card for storing the image information to reduce the size of the camera.

Takahashi fails to teach a controller which detects the remaining capacity of the memory after an image is stored in the memory and prior to the image device conducting a next photographing operation and whether the memory card is inserted in the card slot and detects a capacity of the inserted memory card; and the detected capacity shows that the image information can be stored in the memory card, and (b) a warning is displayed when the memory card is inserted in the card slot and the detected capacity shows that the image information cannot be stored in the memory card even if the image information can be stored in the inside memory.

Sasaki teaches a camera having a controller having a detecting means (CPU 24) for detecting an available capacity of a memory card and connection of the memory card (column 8, line 65 - 68, column 9, lines 15-37, Fig. 10) and generating an alarm to alert the user when the memory card is not inserted in the camera or the memory capacity is not sufficient to store the image information of the next photographing operation (column 8 line 65-68) and permitting the image information to be stored in the

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memory card when the memory card is inserted in the camera and has sufficient capacity for storing the image information and storing the image information a memory.

It would have been obvious to one of ordinary skill in the art to modify Takahashi with Sasaki by using a controller as taught by Sasaki with the apparatus of Takahashi for detecting an available capacity of the memory and the connection of the memory card for generating a representative of the result in order to inform the user the status of the memory thereby preventing error in the recording of the image signal.

Further for claims 52-55, Takahashi as modified with Sasaki further teaches that the image information is stored in the memory card when the memory card is inserted in the card slot and the detected capacity shows that the image information can be stored in the memory card, (b) the image information is stored in the inside memory when the memory card is not inserted in the card slot, and (c) a warning is displayed when the memory card is inserted in the card slot and the detected capacity shows that the image information cannot be stored in the memory card even if the image information can be stored in the inside memory since the image information from image pickup is selectively stored in either the inside memory or memory card (Takahashi, column 4, lines 1-5, column 10, lines 30-50, Sasaki, column 8, line 55-68, column 9, lines 5-37).

Regarding claims 56-58, Takahashi as modified with Sasaki further teaches that the detector includes a memory capacity detector for detecting the capacity of the memory card by electrically accessing the memory card, and a card switch for detecting whether or not the memory card is inserted in the card slot (see Sasaki column 5, lines 20-30, column 9, lines 5-37).

Regarding claims 60-63, Takahashi as modified with Sasaki further teaches that the changer determines to change from a condition in which the memory card is used to store the image information to a condition in which the inside memory is used to store the image information, when the memory card is inserted in the card slot, and the detected capacity shows that the image information cannot be stored in the memory card since the combination of Takahashi and Sasaki teaches generating the alarm or message to the user indicating that the image information can not be stored in the memory card and the user can control switching from the memory card to the inside memory (Takahashi , column 4, lines 1-5, column 10, lines 30-50).

Regarding claim 65, Takahashi as modified with Sasaki further teaches storing the image in the internal memory if the remaining capacity of the memory card is not sufficient to store the image since Takahashi teaches that either one of the internal memory and memory can be selected to store the images .

Regarding claim 66, Takahashi as modified with Sasaki further teaches that the detector detecting the remaining capacity of the memory card when the memory card is inserted in the slot (Sasaki , column 9, lines 5-37)

Regarding claim 67, Takahashi as modified with Sasaki further teaches the detector detect the remaining capacity of the memory card after storing an image (column 8, lines 55-68).

5. Claims 52-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (5,067,029) in view of Watanabe et al (4,887,161).

Regarding claims 52-55 and 64, Takahashi discloses a camera (Fig. 10, column 2, lines 32 –45, column 3, lines 15-25, column 10, lines 28-41) comprising a camera body; an imaging device (12,14) which conducts a photographing operation, wherein following the photographing operation, said imaging device outputs image information; an inside memory (40) provided inside the camera body; a connection adapted to be connected to a medium (34 or 56) inserted inside a housing provided in the camera body; a recorder which stores image information, outputted from said imaging device, in one of the inside memory and the medium (column 10, lines 30-50), and

a changer (24) which selectively determines which one of the inside memory and the medium is used to store image information outputted from said imaging device; and a controller which controls said changer so that (a) the image information is stored in the medium (column 4, lines 1-5, column 7, lines 40-50, column 10, lines 30-50).

Takahashi fails to teach the medium is a memory card that is inserted in the camera using a memory card slot in the camera.

Watanabe teaches a camera (Figs. 4-7) having a memory card slot (20) (column in the camera body used receiving a memory card (20) as an alternative medium for storing image information in order to reduce the overall size of the camera and facilitate managing the image information (column 4, line 65 to column 5, lines 7) .

It would have been obvious to one of ordinary skill in the art to modify Takahashi with Watanabe by incorporating a card slot in the camera body of Takahashi to receive a memory card for storing the image information to reduce the size of the camera.

Takahashi fails to teach a detector which detects whether the memory card is inserted in the card slot and detects a capacity of the inserted memory card; and the detected capacity shows that the image information can be stored in the memory card, and (b) a warning is displayed when the memory card is inserted in the card slot and the detected capacity shows that the image information cannot be stored in the memory card even if the image information can be stored in the inside memory.

Watanabe teaches a camera (Fig. 4) having a controller having detecting means (11) for detecting an available capacity of a memory card and connection of the memory card and generating an alarm by detecting the blank areas in the memory card and displaying the remaining number of frames in the memory card that to be stored with the image information (column 4, lines 65 to column 5, line 38, column, 3, lines 30-35, Figs. 1,2).

It would have been obvious to one of ordinary skill in the art to modify Takahashi with Watanabe by using a detecting means as taught by Watanabe with the apparatus of Takahashi for detecting an available capacity of the memory and the connection of the memory card for generating a representative of the result in order to inform the user the status of the memory thereby preventing error in the recording of the image signal.

Further for claims 52-55, Takahashi as modified with Watanabe further teaches that the image information is stored in the memory card when the memory card is inserted in the card slot and the detected capacity shows that the image information can be stored in the memory card, (b) the image information is stored in the inside memory when the memory card is not inserted in the card slot, and (c) a warning is displayed

when the memory card is inserted in the card slot and the detected capacity shows that the image information cannot be stored in the memory card even if the image information can be stored in the inside memory since the image information from image pickup is selectively stored in either the inside memory or memory card (See Takahashi , column 4, lines 1-5, column 10, lines 30-50, Watanabe (column 4, line 65 to column 5, lines 35)

Regarding claims 56-58, Takahashi as modified with Watanabe further teaches that the detector includes a memory capacity detector for detecting the capacity of the memory card by electrically accessing the memory card, and a card switch for detecting whether or not the memory card is inserted in the card slot (see Watanabe column 4 line 65 to column 5, line 15).

Regarding claims 60-63, Takahashi as modified with Watanabe further teaches that the changer determines to change from a condition in which the memory card is used to store the image information to a condition in which the inside memory is used to store the image information, when the memory card is inserted in the card slot, and the detected capacity shows that the image information cannot be stored in the memory card since the combination of Takahashi and Watanabe teaches generating the alarm or message to the user indicating that the image information can not be stored in the memory card (Watanabe , column 4 line 65 to column 5, line 37) and the user can control switching from the memory card to the inside memory (Takahashi teaches the user can select either a inside memory or a medium to store the image information

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, column 4, lines 1-5, column 10, lines 30-50 and Watanabe using the memory card for storing mage information) .

Regarding claim 65, Takahashi as modified with Watanabe further teaches storing the image in the internal memory if the remaining capacity of the memory card is not sufficient to store the image since Takahashi teaches that either one of the internal memory and memory card can be selected to store the images .

Regarding claim 66, Takahashi as modified wit Watanabe further teaches that the detector detecting the remaining capacity of the memory card when the memory card is inserted in the slot. (See Watanabe, column 4, line 65 to column 5, line 35).

Regarding claim 67, Takahashi as modified with Watanabe further teaches the detector detect the remaining capacity of the memory card after storing an images (See Watanabe column 5, lines 1-30).

Response to Arguments

6. Applicant's arguments filed 18 May 2006 have been fully considered but they are not persuasive.

Regarding claim 64, Applicants argue that Sasaki does not teach that the capacity of the memory card is check after an image is stored in the memory card .

In response the examiner disagrees . It is noted that Sasaki teaches that the images from an imaging device (image sensor or image pickup) are captured by the

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memory card , after one image is captured (stored) by the memory card , the remaining capacity of the memory card is checked for capturing the next image (second image) in response to the input of the user . If the memory card has no sufficient room (remaining capacity) for capturing the next image, a warning signal is generated to alert a user to replace the memory card. It is clear that Sasaki teaches detecting the remaining capacity of the memory card after a picture has been captured and stored in the memory card.

Applicants further argue " that Claim 64 requires, inter alia, "a controller adapted to:

- accept a user input to capture a first image;
- capture the first image from said imaging device responsive to the user input;.
- store the first image in a memory card if the memory card has sufficient remaining capacity;
- determine a remaining capacity of a memory card after the first image is stored to the memory card and prior to accepting a user input to capture a second image;

The controller performs several operations in a specified order. First, the controller accepts an input from the user to capture an image. Second, an image is captured. Third, the image is stored to the memory card. Fourth, the remaining capacity of the memory card is determined. And, fifth, a user input is accepted to capture a second image. In response, it is noted that the applicants' argument does not reflect claim 64.

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Since nowhere in claim does it recites that the controller performs several operations in a "specified order".

Applicants further argue that "It is respectfully submitted that Sasaki does not disclose the claimed sequence of operations. The only sequence disclosed by Sasaki is provided in the flowchart of Fig. 10 and the corresponding description at column 9, lines 1-35. As shown and described, a user input is accepted in step ST 1, the capacity of the memory is determined at step ST 5, and the image data is recorded to the memory card as step ST 7. That is, Sasaki discloses that the memory capacity is determined (ST5) after the user presses the shutter release (ST1) and before the image is stored to the memory card (ST7). Whereas, claim 64 clearly requires that the memory capacity is determined after the user presses the shutter release a first time and after the image is stored to the memory card, but before the user presses the shutter release a ' second time. Of particular note, Sasaki shows in Fig. 10 that after the image data is recorded (ST7) the recording procedure ends. The only way to return to the step of determining the memory capacity of the memory card (ST5) is to first accept a user input to capture an image (ST1). Thus, Sasaki only discloses the sequence ST1 => ST5 =* ST7 => ST1. =:> ..., claim 64 requires a sequence corresponding to ST7 => ST5 =:> ST 1 => ST7 =* Clearly, Sasaki discloses the opposite of the sequence required by claim 64."

In response, it is noted that applicants 's argument does not reflect claim 64, since nowhere in claim 64 does it recites that the images are automatically and continuously captured and stored in the memory one after one and after an images is

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captured and stored in the memory the remaining capacity of the memory is automatically checked.

Regarding claims 52-55, Applicant argues that the combination of Takahashi with Sasaki or Watanabe does not teach storing the images in the memory card without using the inside memory. In response, the examiner disagrees. It is noted that Takahashi teaches the images from an imaging device is automatically stored in an external memory (removable memory) without using an inside memory since Takahashi teaches that images from the imaging device is stored in either one of the inside memory or external memory ((Figs. 7-9). Using a memory card, taught by Sasaki or Watanabe, as the external memory of Takahashi apparatus, the combination of Takahashi and Sasaki or Watanabe teaches a camera having a inside memory, a memory card and a controller for automatically storing the images from an imaging device in the memory card when the memory card has sufficient room for storing the images.

Regarding claims 52-67, applicants argue that "Takahashi in view of Sasaki, is respectfully traversed because the combination fails to teach "a controller which (a) controls said detector to detect a capacity of the inserted memory card after the recorder stores image information in the memory card and prior to said imaging device conducting a next photographing operation."

In response, the examiner disagrees. It is noted that Sasaki teaches checking the remaining capacity of the memory after an images is stored in the memory and before the next photographing operation. Sasaki at column 8 lines 65-68 teaches that

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after an image is stored in the memory, the memory is checked for a sufficient capacity to store the next images, if not, the next photographing is inhibited until a new memory is set.

Regarding claims 52-67, Applicants argue that "Watanabe only teaches that when a memory card is inserted into the camera, the memory card is searched to determine the number of remaining frames. The number of remaining frames is loaded into a counter, and the counter is decremented whenever an image is saved to the memory. Thus, Watanabe does not teach that the controller controls the detector to detect the capacity of the card as required by claim 52.

In response. It is submitted that Watanabe clearly teaches a controller for detecting the capacity of the memory after every time a image is stored in the memory because the remaining of frames of the memory is the remaining capacity of the memory every time an images is stored in the memory.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.N

HUY T. NGUYEN
PATENT EXAMINER